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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

08/978,632

11/25/1997

ELAZAR RABBANI

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10/08/2008

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NEW YORK, NY 10022

EXAMINER

WOLLENBERGER, LOUIS V

ART UNIT

PAPER NUMBER

1635

MAIL DATE

DELIVERY MODE

10/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 08/978,632 | Applicant(s) RABBANI ET AL. | |
| | Examiner Louis Wollenberger | Art Unit 1635 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 246-252,255,264-267 and 271-274 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 246-252,255,264-267 and 271-274 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Notice of non-compliant amendment</u> . |

DETAILED ACTION

Status of Application/Amendment/Claims

Applicant's response filed 7/8/08 is acknowledged. Also acknowledged are Applicant's amendments to the claims. The amendment adds new limitations to independent claim 246 and, thereby, all claims dependent therefrom, and adds new claims 271-274.

The amendment does not comply with 37 CFR 1.121 for the reasons given below and on the attached notice of non-compliant amendment form (PTOL-324).

With entry of the amendment, Claims 246-252, 255, 264-267, and 271-274 are pending and subject to restriction as follows.

Notice of non-compliant amendment

The amendment to the claims filed on 7/8/08 does not comply with the requirements of 37 CFR 1.121(c) because all claims indicated as "currently amended" have not been provided with markings to indicate the changes that have been made relative to the immediate prior version of the claims. For example, see claim 266. Further, certain claims indicated as "previously presented" are currently amended relative to the immediate prior version of the claims. For example, see claim 255, which contains an underline indicative of a change relative to the prior version. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c). Correction is required.

Election/Restrictions

37 CFR 1.142(a), second sentence, indicates that a restriction requirement "will normally be made before any action upon the merits; however, it may be made at any time before final action. This means the examiner should make a proper requirement as early as possible in the prosecution, in the first action if possible, otherwise, as soon as the need for a proper requirement develops. Before making a restriction requirement after the first action on the merits, the examiner will

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consider whether there will be a serious burden if restriction is not required. MPEP 811.

Since 37 CFR 1.142(a) provides that restriction is proper at any stage of prosecution up to final action, a second requirement may be made when it becomes proper, even though there was a prior requirement with which applicant complied. *Ex parte Benke*, 1904 C.D. 63, 108 O.G. 1588 (Comm'r Pat. 1904). MPEP 811.02.

In the instant case, with entry of Applicant's amendments to the claims, filed 7/8/08, it has become clear that, in going forward, searching and examining each of the claims, as now written, in a single application will impose a serious burden on the examiner in view of the time allowed by the Office to search and examine a single invention in an application. As explained in the enumerated list below, because of the enormous array of structural features expressly recited in the claims, the claims recite countless numbers of different constructs for search and consideration with regard to utility, novelty, obviousness, written description, new matter, enablement, double patenting, and priority (determination of effective filing date). Accordingly, the Examiner submits it would be serious burden to search and examine each of the presently claimed constructs in the same application.

The instant claims recite a plurality of related but distinct nucleic acid constructs. Related inventions are distinct if: (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant

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case, the nucleic acid constructs as claimed have materially different designs.

Specifically, the constructs differ with regard to:

1. the type of modified element in the construct, which may be 1) a modified nucleotide, 2) a nucleotide analog, or 3) a combination of both (claim 246, 267, 271, and 273 among others);
2. whether the construct comprises 1) at least one modified nucleotide with a fusogenic protein and at least one modified nucleotide with a ligand; 2) at least one nucleotide analog with a fusogenic protein and at least one nucleotide analog with a ligand; 3) at least one modified nucleotide with a fusogenic protein and at least one nucleotide analog with a ligand; or 4) at least one nucleotide analog with a fusogenic protein and at least one modified nucleotide with a ligand (claim 246);
3. the type of nucleic acid product generated from the construct, which may be 1) an antisense RNA; 2) antisense DNA; 3) sense RNA; 4) ribozymes; 5) messenger RNA; or 6) a combination of any of the foregoing (claim 246, 271, and 273);
4. whether 1) the construct or 2) a portion of the construct is 1) linear; 2) circular; or 3) branched (claim 247);
5. whether 1) the construct or 2) a portion of the construct is 1) single stranded; 2) double stranded; 3) partially double stranded; or 4) triple stranded (claims 248 and 249);
6. whether the construct comprises 1) DNA; 2) RNA; 3) a DNA-RNA hybrid; 4) a DNA-RNA chimera; or 4) a combination of any of the foregoing (claim 252);

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7. whether 1) at least one nucleotide analog is modified on 1) the backbone; 2) a side chain; or 3) both (claim 255);
8. whether the ligand is attached to 1) a single stranded segment; 2) a double stranded segment; 3) a single stranded construct tail; 4) a sequence complementary to a construct tail; or 5) a combination of any of the foregoing (claim 264);
9. whether the ligand is 1) a macromolecule; 2) a small molecule; or 3) a combination of both;
10. the type of non-nucleic acid entity, which may be 1) a polypeptide; 2) a protein; 3) a saccharide; 4) a fatty acid; 5) a fatty acid ester; or 6) a combination of any of the foregoing (claim 271);
11. whether the non-nucleic acid entity further confers 1) cellular localization; 2) nuclear localization; or 3) a combination of any of the foregoing (claim 272); and
12. whether the non-nucleic acid entity confers 1) nuclease resistance; 2) cell targeting; 3) cellular localization; 4) nuclear localization; or 5) a combination of any of the foregoing.

For the same reasons, the different nucleic acid constructs do not overlap in scope, as evidenced by their mutually exclusive features. Furthermore there is nothing of record to show the different constructs to be obvious variants of one another, though they may each be obvious over the prior art.

Searching and examining each of these groups in a single application would present a serious burden on the examiner, since each group would require different keyword searches (i.e., different fields of search) and different considerations of the patent and non-patent literature with regard to utility, novelty, obviousness, written description, new matter, enablement, double patenting, and priority (determination of effective filing date).

Therefore, because these inventions are distinct for the reasons given above, and the searches required for each are divergent and not coextensive, and because a search and examination of all of the Inventions in a single application would present a serious burden on the Examiner, restriction for examination purposes as indicated is proper.

Applicant is advised this is not a species election but an election of a single independent or distinct invention. Applicant must elect a single, structurally defined construct, whose features are not mutually exclusive of one another, for prosecution on the merits. To be fully responsive, the election must address each of the categories enumerated above and include a single listing of all claims that read on the collective election as a whole. Should applicant elect “a combination of the foregoing” in any of these categories, applicant must specify by name the constituents of the combination, since in many claims several different combinations are conceivable.

Linked inventions

Linking claim practice is in effect. Applicant will receive a full and complete search and examination of any linking claim along with the subgeneric invention, elected above. For example, claim 246 links the inventions of claims 246-252, 255, 264-267, and 274. Upon electing a single alternative from claim 246, applicant will receive a search and examination of

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the full scope of claim 246 and any nested linking claim(s) thereof along with the specifically elected construct above.

The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claim(s). Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions **shall** be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104 **Claims that require all the limitations of an allowable linking claim** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Conclusion

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a

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serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Wollenberger whose telephone number is (571)272-8144. The examiner can normally be reached on M-F, 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James (Doug) Schultz can be reached on (571)272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Louis Wollenberger/
Examiner, Art Unit 1635
September 27, 2008